

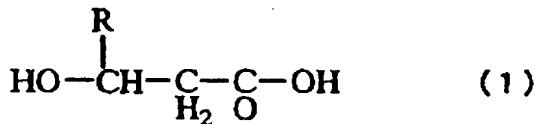
CLAIMS

1. A transformant

wherein at least one kind of gene expression cassette
 5 comprising a polyester synthesis-associated enzyme gene has been introduced into a yeast.

2. The transformant according to Claim 1

wherein the polyester is a copolymer resulting from the
 10 copolymerization of 3-hydroxyalkanoic acids of the following general formula (1);

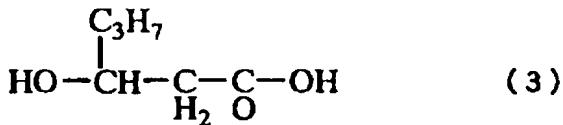
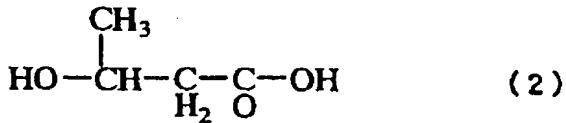


in the formula, R represents an alkyl group.

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3. The transformant according to Claim 1 or 2

wherein the polyester is copolyester P(3HB-co-3HH)
 resulting from the copolymerization of 3-hydroxybutyric acid
 of the following formula (2) and 3-hydroxyhexanoic acid of the
 20 following formula (3);

4. The transformant according to any of Claims 1 to 3
 wherein the yeast belongs to any of the genera

25 Aciculonconidium, Ambrosiozyma, Arthroascus, Arxiozyma, Ashbya,
Babjevia, Bensingtonia, Botryoascus, Botryozyma, Brettanomyces,

Bullera, Bulleromyces, Candida, Citeromyces, Clavispora,
Cryptococcus, Cystofilobasidium, Debaryomyces, Dekkara,
Dipodascopsis, Dipodascus, Eeniella, Endomycopsella, Eremascus,
Eremothecium, Erythrobasidium, Fellomyces, Filobasidium,
5 Galactomyces, Geotrichum, Guilliermondella, Hanseniaspora,
Hansenula, Hasegawaea, Holtermannia, Hormoascus, Hypopichia,
Issatchenka, Kloeckera, Kloeckeraspora, Kluyveromyces, Kondoa,
Kuraishia, Kurtzmanomyces, Leucosporidium, Lipomyces,
Lodderomyces, Malassezia, Metschnikowia, Mrakia, Myxozyma,
10 Nadsonia, Nakazawaea, Nematospora, Ogataea, Oosporidium,
Pachysolen, Phachytichospora, Phaffia, Pichia, Rhodosporidium,
Rhodotorula, Saccharomyces, Saccharomycodes, Saccharomycopsis,
Saitoella, Sakaguchia, Saturnospora, Schizoblastosporion,
Schizosaccharomyces, Schwanniomyces, Sporidiobolus,
15 Sporobolomyces, Sporopachydermia, Stephanoascus,
Sterigmatomyces, Sterigmatosporidium, Symbiotaphrina,
Sympodiomyces, Sympodiomycopsis, Torulaspora, Trichosporiella,
Trichosporon, Trigonopsis, Tsuchiyaea, Udeniomyces, Waltomyces,
Wickerhamia, Wickerhamiella, Williopsis, Yamadazyma, Yarrowia,
20 Zygoascus, Zygosaccharomyces, Zygowilliopsis and Zygozyma.

5. The transformant according to any of Claims 1 to 4
wherein the yeast is Yarrowia lipolytica.

25 6. The transformant according to any of Claims 1 to 4
wherein the yeast is Candida maltosa.

7. The transformant according to any of Claims 1 to 6
wherein a polyester synthesis-associated enzyme gene
30 expression cassette comprises a promoter and a terminator,
said promoter and said terminator functioning in a yeast.

8. The transformant according to Claim 7
wherein the promoter and terminator are derived from
35 Yarrowia lipolytica.

9. The transformant according to Claim 7 or 8
wherein the promoter is derived from Yarrowia lipolytica
ALK3.

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10. The transformant according to Claim 7 or 8
wherein the terminator is derived from Yarrowia
lipolytica XPR2.

10 11. The transformant according to Claim 7
wherein the promoter and terminator are derived from
Candida maltosa.

15 12. The transformant according to Claim 7 or 11
wherein the promoter is derived from Candida maltosa ALK1.

13. The transformant according to Claim 7 or 11
wherein the terminator is derived from Candida maltosa
ALK1.

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14. The transformant according to any of Claims 1 to 13
wherein the polyester synthesis-associated enzyme gene
is derived from Aeromonas caviae.

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15. The transformant according to any of Claims 1 to 13
wherein the polyester synthesis-associated enzyme gene
is a PHA synthase gene derived from Aeromonas caviae or a PHA
synthase gene and (R)-specific enoyl-CoA hydratase gene.

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16. The transformant according to Claim 15
wherein said PHA synthase gene has the sequence represented
by SEQ ID NO:3
and the (R)-specific enoyl-CoA hydratase gene has the
sequence represented by SEQ ID NO:4.

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17. A method of producing a polyester using the transformant according to any of Claims 1 to 16 which comprises growing said transformant and harvesting a polyester from the resulting culture.

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18. A polyester synthesis-associated enzyme gene which is modified from at least one gene code CTG to TTA, TTG, CTT, CTC or CTA.

10 19. The polyester synthesis-associated enzyme gene according to Claim 18
which codes for an enzyme derived from a bacterium.

15 20. The polyester synthesis-associated enzyme gene according to Claim 19
wherein said bacterium is Aeromonas caviae.

21. The polyester synthesis-associated enzyme gene according to Claim 20

20 wherein the enzyme gene derived from Aeromonas caviae is a PHA synthase gene or a (R)-specific enoyl-CoA hydratase gene.

22. The polyester synthesis-associated enzyme gene according to Claim 21

25 wherein said PHA synthase gene has the sequence represented by SEQ ID NO:3.

23. The polyester synthesis-associated enzyme gene according to Claim 21

30 wherein said (R)-specific enoyl-CoA hydratase gene has the sequence represented by SEQ ID NO:4.